Focus on Water Availability



Water Resources Program

Revised February 2015

Hangman Watershed, WRIA 56

This focus sheet provides information on the availability of water for new uses in the Hangman Watershed. This information provides a starting point for potential water users in determining the best strategies for securing water for a future project or proposal in this area.

The Hangman Watershed (Water Resources Inventory Area, WRIA, 56) located in eastern Washington includes Hangman Creek and its numerous small tributary creeks and streams. Hangman Creek and some of its tributaries originate in Idaho.

The annual precipitation in the Hangman Watershed ranges from 17 inches per year around the City of Spokane to 25 inches in the higher elevations in the eastern portion of the watershed. Only a fraction of this precipitation becomes available for human and economic uses due to the high rate of evaporation. Most of the precipitation arrives during the winter months, when water use is the lowest. During the summer the snowpack is gone, there is little rain, and naturally low stream flows are dependent on groundwater. This means that groundwater and surface water are at their lowest when water demands are the highest.

Much of the water in the Hangman Watershed has already been "spoken for" (appropriated). Increased demands from population growth, declining groundwater levels, and impacts from climate change are adding to the challenge of finding new water supplies in WRIA 56, especially during the summer months.

Factors affecting water availability

In 2004, the U.S. Bureau of Reclamation (BOR) filed notice with the Department of Ecology (Ecology) that the U.S. intends to study the possible use of unappropriated waters of the Columbia River and its tributaries above Priest Rapids Dam, pursuant to RCW 90.40.030. The withdrawal of these waters from future appropriations is in effect until December 23, 2017, to allow for continued investigation of the Yakima River Basin Integrated Water Resources Management Plan.

New applications for surface water and groundwater connected to surface water within WRIA 56 cannot be processed until a release from the BOR is obtained, or the withdrawal has expired.

MORE INFORMATION



Definitions

Adjudication: A legal process conducted through a superior court to determine the extent and validity of existing water rights.

Appropriation (of water): The process of legally acquiring the right to use specific amounts of the public water resource for beneficial uses. Water rights (appropriations) are the right to use water, not own the water, and have specific conditions attached.

Instream flows: Flow levels adopted into a rule that create a water right for the stream to protect fish, wildlife, stock watering, recreational uses, and other instream uses and values. Instream flows are a regulatory threshold, and do not require any specific flow to be maintained.

Mitigation plan: A scientificallysound plan intended to avoid impairment to existing water rights or capturing water from a closed source.

Surface water source limitation (SWSL): A recommendation from the Department of Fish and Wildlife that flows be protected to maintain fish populations. See RCW 77.57.020

Adjudications

The Crystal Springs adjudication has been completed within WRIA 56. In general, most of the water in an adjudicated basin has been appropriated and new appropriations are not available.

Groundwater

Availability and yield of groundwater from bedrock in this WRIA is very limited by climate and geology. In addition groundwater levels in many areas are in decline, and the deeper aquifers show signs of very low or no recharge from precipitation. Therefore, little if any water is available for new consumptive uses.

Water in the West Plains (northwest WRIA 56) is generally considered over-appropriated, and no water is available for new consumptive uses.

Since 2010, the WRIA 56 Watershed Planning Unit has conducted several groundwater studies. Contact the Spokane Conservation District for additional information on these and related studies. http://www.sccd.org/watershedplanning.html.

Surface water

The Hangman Watershed has administrative restrictions known as Surface Water Source Limitations (SWSL), which puts limits on most water sources in the watershed. Groundwater connected to the surface sources is also subject to SWSL restrictions. Often these restrictions will require that newer water uses stop during low flow periods. A SWSL indicates that most water has been appropriated within the watershed. Marshall Creek is "closed" by SWSL, meaning the water body is closed to new uses.

The WRIA 56 Watershed Planning Unit mostly agreed to recommended instream flows, but could not quite get consensus from all parties. The group also wanted to develop recommendations for managing groundwater (specifically domestic permit-exempt wells) before requesting Ecology begin rulemaking. Significant growth is anticipated in the Lower Hangman valley within Spokane County, and increased use of domestic permit-exempt wells for single and group residential use is anticipated. Growth in permit-exempt wells is likely to have a negative impact on stream flows.

Water supply available for further appropriation

The Hangman Watershed is not closed by rule to new water uses. However, the majority of water has been appropriated and new water rights would likely be seasonal (interruptible) or the impacts of the water use would need to be fully offset through mitigation.

Office of Columbia River (OCR) is aggressively pursuing water supply development opportunities throughout the Columbia Basin. You can find additional information at the OCR Web site at: www.ecy.wa.gov/programs/wr/cwp/crwmp.html.

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The *groundwater permit exemption* allows certain users of small quantities of groundwater (most commonly, single residential well owners) to construct wells and develop their water supplies without obtaining a water right permit from Ecology. However water rights developed through the permit exemption are not exempt from state water law or the water right seniority system, and could be regulated during future drought periods. For more information about the groundwater permit exemption, refer to https://fortress.wa.gov/ecy/publications/summarypages/fwr92104.html.

The permit exemption may not be available to prospective water users in certain areas that have been closed to further appropriation because there is limited or no water available. Check with Ecology staff at the regional office for more information.

Additional options for finding a water supply include:

- Connecting to an established water supplier. This is the fastest and simplest option.
- Processing a change application of an existing water right with the Spokane County Water Conservancy Board.
- Processing an application through the Cost Reimbursement Program.
 https://fortress.wa.gov/ecy/publications/SummaryPages/0511016.html. You will likely need to develop a mitigation strategy to offset any impacts your water use will have on surface waters.

For more information on these and other options, refer to "Alternatives for Water Right Application Processing" https://fortress.wa.gov/ecy/publications/SummaryPages/1111067.html.

Pending water right applications in this watershed

Washington water law is based on the "prior appropriation" system, often called "first in time, first in right." Applications for water from the same source must be processed in the order they are received. Use of the water is likewise determined by the seniority system; a senior water right holder gets their water before a newer (junior) user.

Ecology asks anyone who needs a water right (new, change, or transfer) to submit the pre-application consultation form and meet with us to review your water supply needs and project proposal.

- Apply for a New Water Right <u>http://www.ecy.wa.gov/programs/wr/rights/newrights.html</u>
- Apply to Change or Transfer a Water Right or Claim http://www.ecy.wa.gov/programs/wr/rights/change_transfer_use.html

The map in this document includes the WRIA boundaries and where SWSLs are in effect. Immediately below are other information sources to assist you with your research:

• Locate and research water rights on land parcels anywhere in the state (Water Resource Explorer) http://www.ecy.wa.gov/programs/wr/info/webmap.html

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 Pending Water Right Applications by County http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html

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- Subscribe to a water right application RSS feed for a county or WRIA http://www.ecy.wa.gov/programs/wr/rights/wr_app_rss.html
- WRIA map showing the total number of water right claims, certificates, permits and applications http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright-wria-maps.pdf
- Search and view well reports using a variety of search tools https://fortress.wa.gov/ecy/waterresources/map/WCLSWebMap/default.aspx

For more information

The rule and rulemaking process: http://www.ecy.wa.gov/programs/wr/rules/557-ov.html

Regional watershed planning, information and rule implementation, go to http://spokanewatersheds.org/

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